



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 460E 1DW460ELEM712760

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0199940	JR0180169	JR0146806
Sample Date		Client Info		08 Feb 2024	24 Aug 2023	13 Mar 2023
Machine Age	hrs	Client Info		2960	2486	1959
Oil Age	hrs	Client Info		0	0	1959
Filter Age	hrs	Client Info		0	0	1959
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	13	13	7
Iron	ppm	ASTM D5185m	>71	3	6	5
Chromium	ppm	ASTM D5185m	>11	0	0	0
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	<1	<1	1
Lead	ppm	ASTM D5185m	>13	0	0	0
Copper	ppm	ASTM D5185m	>21	4	<1	1
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

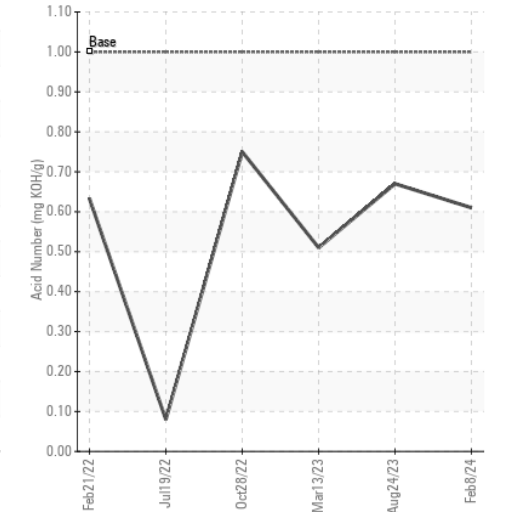
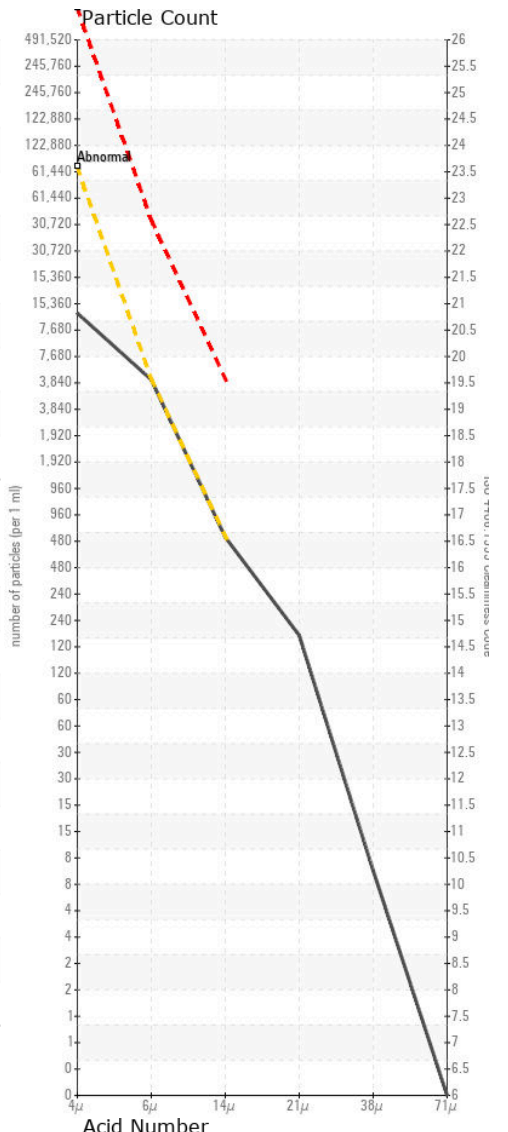
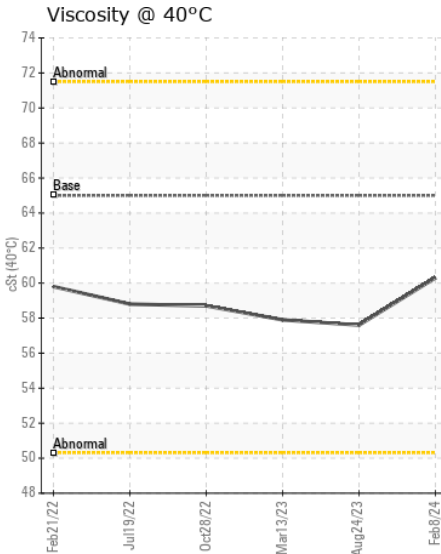
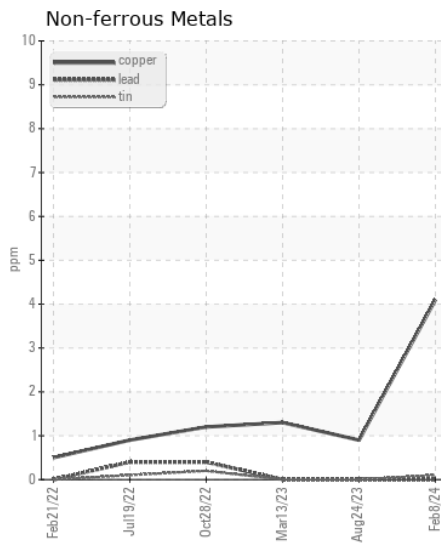
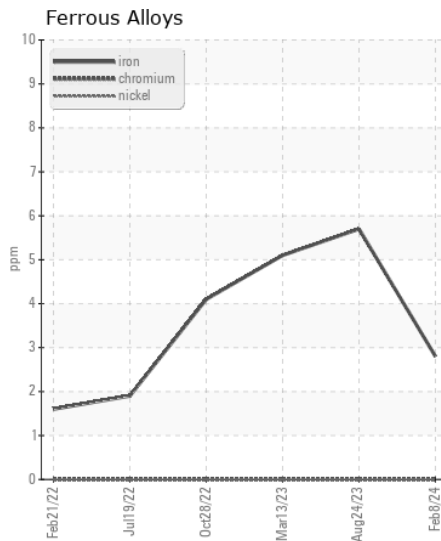
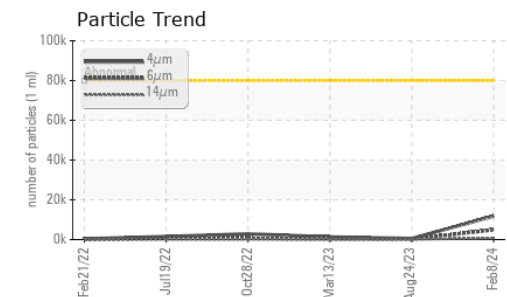
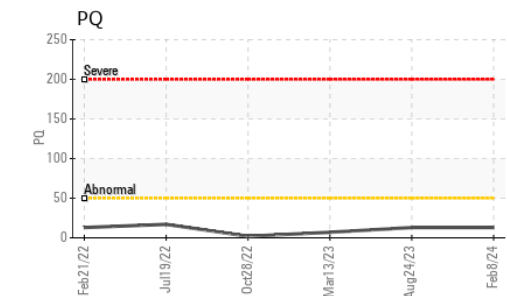
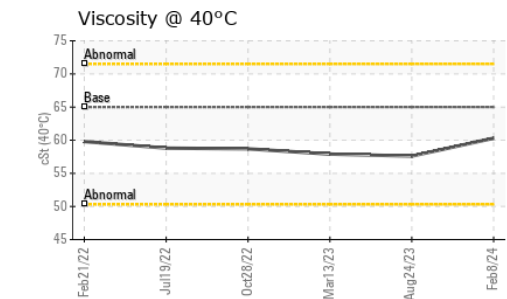
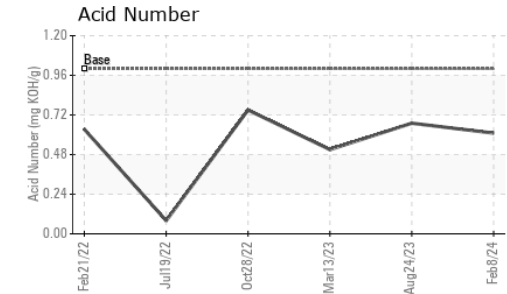
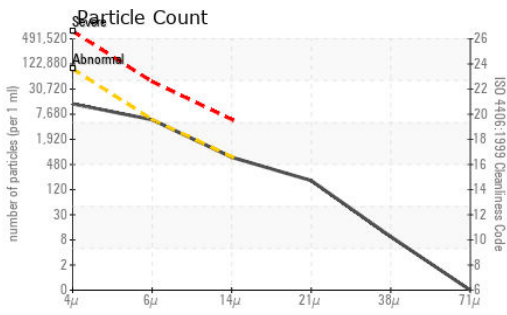
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	7	2	2
Potassium	ppm	ASTM D5185m	>20	0	2	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	11792	547	1334
Particles >6µm		ASTM D7647	>5000	4934	214	377
Particles >14µm		ASTM D7647	>640	628	27	32
Particles >21µm		ASTM D7647	>160	174	9	8
Particles >38µm		ASTM D7647	>40	8	1	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	21/19/16	16/15/12	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	1	2	<1
Boron	ppm	ASTM D5185m		49	4	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		16	8	2
Calcium	ppm	ASTM D5185m	87	1708	299	297
Phosphorus	ppm	ASTM D5185m	727	841	637	628
Zinc	ppm	ASTM D5185m	900	1112	854	837
Sulfur	ppm	ASTM D5185m	1500	3810	2340	2360
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.61	0.67	0.51
Visc @ 40°C	cSt	ASTM D445	65	60.3	57.6	57.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199940 **Received** : 09 Feb 2024
Lab Number : 06084685 **Tested** : 12 Feb 2024
Unique Number : 10872130 **Diagnosed** : 12 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)